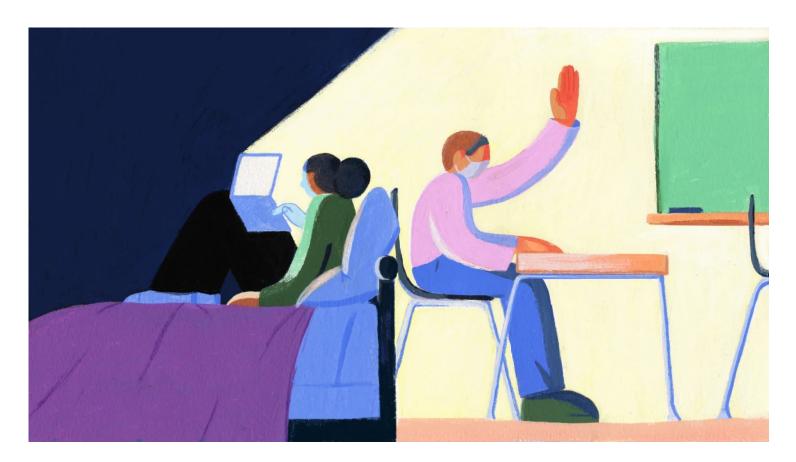
CORONAVIRUS

# Remote students are more stressed than their peers in the classroom, study shows

The study by NBC News and Challenge Success is one of the first to shed light on differences between students who are online-only and those in classrooms.



— Remote students were slightly more likely to fret about grades than their peers in the classroom, and they also reported doing more homework per week, a new study found. Jackson Joyce / for NBC News



Feb. 15, 2021, 7:00 AM EST

## By Erin Einhorn

As debates rage across the country over whether schools should teach online or in person, students like Sean Vargas-Arcia have experienced the pros and cons of both.

"I'm much happier in person," said Sean, 16, a junior at Yonkers Middle High School in New York. As Covid-19 rates have fluctuated, he has gone back and forth between online classes and attending in person two days per week.

It's stressful worrying about contracting the coronavirus at school, said Sean, who has health issues including epilepsy and a grandmother who lives with his family. But his online classes wear him down.

"When I'm at home, fully remote, it's more like a sluggish feeling," he said. "I'm usually feeling distressed and tired and I just don't want anything to do with school anymore."



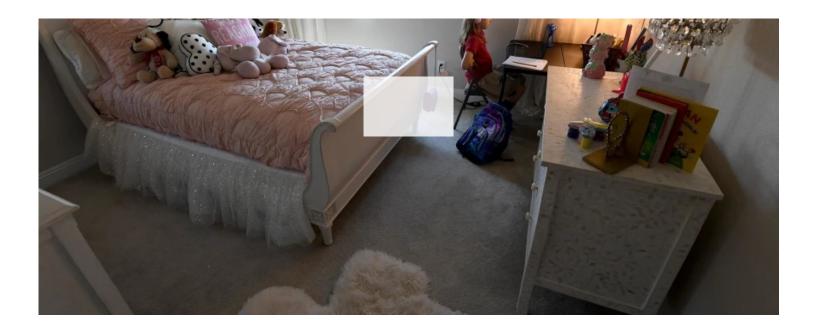
— Sean Vargas-Arcia, 16, a junior at Yonkers Middle High School, has gone back and forth between online classes and attending in person two days a week. Courtesy Sean Vargas-Arcia

There's no question that the pandemic has been hard on children, whether or not their schools have reopened. A flood of research in recent months has found alarming spikes in depression and anxiety among children and their parents. Multiple studies have found that students – especially those with disabilities and from low-income families – are learning less than they should.

But a new study from NBC News and Challenge Success, a nonprofit affiliated with the Stanford Graduate School of Education, is one of the first to shed light on the differences between students whose classes have been exclusively online and those who've been able to attend in person at least one day per week.

All this week, watch "NBC Nightly News with Lester Holt" and the "TODAY" show for more on "Kids Under Pressure," a series examining the impact of the pandemic on children

Study shows remote students face more stress, exhaustion than those in classroom

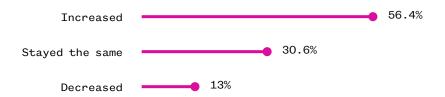


The survey last fall of more than 10,000 students in 12 U.S. high schools, including Yonkers, found that students who'd spent time in the classroom reported lower rates of stress and worry than their online peers.

While just over half of all students surveyed said they were more stressed about school in 2020 than they had been previously, the issue was more pronounced among remote students. Eighty-four percent of remote students reported exhaustion, headaches, insomnia or other stress-related ailments, compared to 82 percent of students who were in the classroom on some days and 78 percent of students who were in the classroom full time.

# **Stressed out**

How students say their stress levels have changed since before the pandemic:



#### Notes

NBC News and Challenge Success surveyed more than 10,000 high school students in fall 2020.

Source: NBC News and Challenge Success Graphic: Wen Si and Nigel Chiwaya / NBC News

Remote students were also slightly less likely to say they had an adult they could go to with a personal problem and slightly more likely to fret about grades than their peers in the classroom. And the remote students did more homework, reporting an average of 90 additional minutes per week, the study found.

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"Remote learning – and I don't think this is a surprise to anyone – is just more challenging," said Sarah Miles, the director of research and programs at Challenge Success and one of the leaders of the study. "It's harder for kids to feel connected. It's harder for teachers, for the adults in the school, to connect and that's a foundational element. In order for kids to learn, they need to feel safe and connected. Everything else rests on top of that."

Students struggling with workload and stress amid pandemic



Challenge Success, an education research and school support organization, surveys most students in dozens of schools a year to help teachers and administrators better meet their needs. The 12 schools surveyed last fall, in Arizona, Texas, New York and the Midwest, are demographically similar to the nation in terms of student family income, though not necessarily in terms of race, Miles said.

The debate around reopening U.S. schools has become increasingly fraught, with parents and political leaders including President Joe Biden loudly calling for schools to reopen and teachers in some parts of the country threatening to walk off the job over safety concerns. On Friday, the Biden administration released guidelines for how to safely reopen schools, advising precautions including masks, social distancing and contact tracing.

Miles said the new research doesn't mean that schools should rush to reopen before putting safety protocols in place. Instead, she said, it shows the importance of making sure teachers and staff members feel comfortable returning to the classroom.

"If they don't feel safe and supported, kids won't feel safe and supported," she said.

But, at the same time, she said, the study underscores the damage online learning is doing.

"We need to prioritize getting to a place where everyone feels comfortable going back to school," Miles said, "because it's urgent."

# **Disengaged**

Percent of students who say they are purposefully or fully engaged in school:



#### **Notes**

Challenge Success surveyed more than 10,000 high school students in fall 2020 and 13,000 students in fall 2019.

Source: NBC News and Challenge Success Graphic: Wen Si and Nigel Chiwaya / NBC News

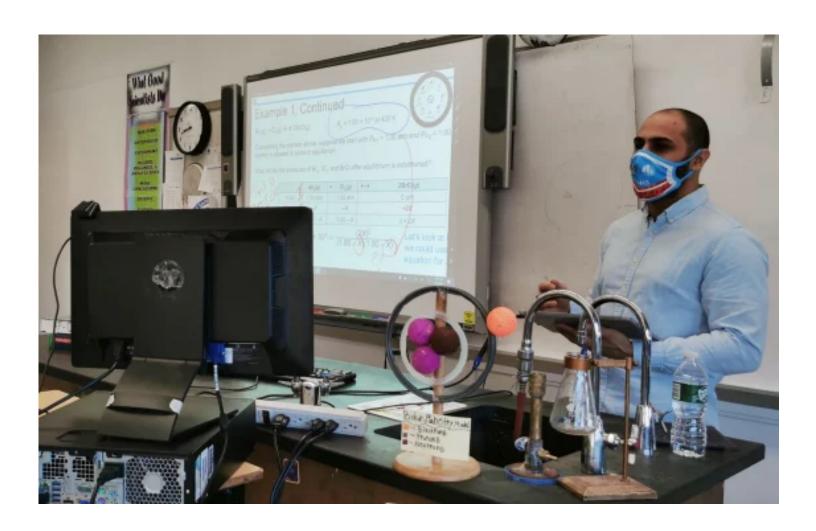
# 'A bit of magic' in the classroom

All of Jordan Salhoobi's chemistry students at Yonkers Middle High School are getting the same lessons at the same time.

The ones wearing masks in his classroom hear the same lectures and see the same demonstrations as students watching the livestream at home. When he writes or draws on his computer tablet, students at home see the same images on their screens that students in the classroom see projected on the wall.

But Salhoobi's students are not getting the same benefits, he said.

"In the room, you get more eye contact," he said. "On the screen, oftentimes the kid could be sitting in front of a window. You can't see them, so it's hard to make sure they're attentive."



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— Jordan Salhoobi, a chemistry teacher at Yonkers Middle High School, instructs students in person and remotely at the same time. Courtesy Jordan Salhoobi

While it's difficult to compare his students' performance, Salhoobi said his in-person students sometimes stay after class for extra help that online students rarely ask for. Online students seem more reluctant to raise their hands and they often look tired.

"I think that actually coming to school and getting dressed makes kids feel more like they have a purpose in life," he said.

When Yonkers started offering a hybrid option in October that allows students to attend in person either Monday and Tuesday or Thursday and Friday, most students chose to remain online. Only about a third of students are currently in the hybrid program, a Yonkers district spokeswoman said, leaving many classrooms with just a handful of students.

## Full coverage of the coronavirus outbreak

Yonkers principal Jade Sharp said that she hasn't seen significant differences in grades or test scores between remote and hybrid students, but that she wasn't surprised to see survey data showing that her remote students are more stressed.

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"I feel sorry for our students in this Covid situation," she said, noting that many of her 1,100 high school students have responsibilities at home such as caring for younger siblings in addition to their schoolwork. Three-quarters come from families the state considers economically disadvantaged, including many from immigrant families. Some have parents who've lost jobs. Some lost loved ones to Covid-19. And many are reeling from the social and political tensions of the past year.

The school goes out of its way to support students, Sharp said, limiting instruction to half days on "wellness Wednesdays," and hosting after-school clubs focused on mental health.

But none of that offers what even a couple of days in the classroom interacting with teachers and peers can do, said Tara O'Sullivan, who teaches U.S. history at Yonkers.

"There's a bit of magic that can happen in a classroom," O'Sullivan said. "There's nothing like the rapport and energy of kids working with each other, the sort of flow of conversation and bouncing off ideas that's obviously present in person."



— Tara O'Sullivan, who teaches U.S. history at Yonkers Middle High School, says her remote students are missing out on the "magic" that happens in a classroom. Courtesy Tara O'Sullivan

# Headaches and eye strain

Tanya Palmer, 16, a Yonkers junior, has managed to keep up her grades this year – but only because she puts in extra time to make up for what she's missing in class.

"I don't feel like I'm really learning much," said Tanya, who chose to stay remote to protect her 75-year-old grandfather, who lives with her family. "There's a lot of teaching myself things."

Things have gotten better since the beginning of the school year when technical glitches were more common and teachers were still adjusting. But when she finishes her five hours of online classes each day, she's often staring down hours of extra research and reading to actually learn the material.

"I get a lot of headaches and eye strain," she said. "My eyes are so dry, and I get back pain, too."



— Tanya Palmer, 16, a junior at Yonkers Middle High School, says she often has to teach herself while learning remotely. Courtesy Tanya Palmer

The NBC News and Challenge Success study found that online-only students in Yonkers reported an average of 31 minutes more homework on the weekend and 70 more minutes during the week than their classmates in the hybrid program. Though most students were not getting anywhere close to the nine hours of sleep recommended for adolescents, reporting just over six hours, the hybrid students reported sleeping an average of about 10 minutes more per night than their online peers.

"It's 10 o'clock and I see her on the computer," said Tanya Gonzalez, Tanya's mother. "I get close to her, thinking maybe she's watching a video, but no, she's doing classwork."

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Sean Vargas-Arcia had more energy when he was in school two days a week, and more ways to understand his coursework, he said, recalling how he struggled last semester to visualize the molecular structure of fatty acids known as lipids until he saw a 3-D model in his biology classroom.

"I was like, 'Oh, that helps,' because I could actually see it," he said.

These days, however, Sean is back to being fully online. So few students returned when the school reopened last month after closing for a few weeks because of higher infection rates that he was the only student in some of his classes. He decided there wasn't much point, so now he wakes up, walks across his room and sits down in front of a computer from 7:45 a.m. to 1 p.m. without a break. A quirk in his schedule put his lunch hour at the end of the day.

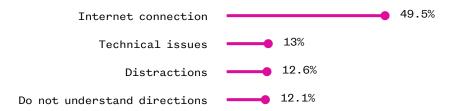
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With college applications looming, Sean worries his grades in online classes will suffer, costing him his shot at his first-choice, Brown University, next year.

"There's a lot of anxiety that surrounds thinking about my future," he said.

#### **Disconnected**

Top challenges remote students reported facing while completing schoolwork:



#### **Notes**

Challenge Success surveyed more than 10,000 high school students in fall 2020.

Source: NBC News and Challenge Success Graphic: Wen Si and Nigel Chiwaya / NBC News

He's also struggling with isolation from his friends. He used the quiet hours over the summer for reflection and, in September, came out to family and friends as transgender. He announced his name change on social media, but most of his classmates haven't seen him in person since then.

Everything has been more difficult this year for students at Yonkers, an academically selective school that draws a diverse mix of students – half Latino, 20 percent white, 15 percent Asian, 13 percent Black – from the city of the same name just north of New York City. Sports and afterschool programs are largely gone, and school events, like the gala Yonkers traditionally throws in the spring to celebrate the many cultures in the school, have been canceled.

For some students, it's a small price to pay to keep their families safe, said Emma Maher, 17, a junior who chose the online option because her sister has asthma and her grandmother has a compromised immune system.

"The sacrifice is worth it," she said, "because I value the health of my family and loved ones."

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— Emma Maher, 17, a junior at Yonkers Middle High School, chose the remote option to protect her family.

Courtesy Emma Maher

But educators worry about the long-term impact on a generation of children who are stressed out, struggling to learn and missing their friends.

"You took away so much from these kids," said Salhoobi, the chemistry teacher. "You took away sports. You took away interactions. It's kind of like kids are in jail now when they're 100 percent online."

#### Erin Einhorn

Erin Einhorn is a national reporter for NBC News, based in Detroit.

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